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10/608,264	06/30/2003	Sandrine Decoster	239284US0	1398

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EXAMINER

ARNOLD, ERNST V

ART UNIT	PAPER NUMBER
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1616

DATE MAILED: 10/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/608,264	DECOSTER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Ernst V. Arnold	1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 July 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) 34-36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/30/03</u>   | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

Claims 1-36 are pending.

Acknowledgement is made of Applicant's election with traverse of Group I claims 1-33 drawn to a composition filed on 7/19/2006. Applicant traversed that the Examiner has not shown that the silicone polymers as claimed are either not capable of use together or can have a materially different design, mode of operation, function or effect. The Examiner cannot agree. The Examiner stated that the polymers have different structures, thus they are of a different design from one another and are not obvious variants of one another. Applicant asserted that the present claims and invention do not relate to washing hair. The Examiner cannot agree. Instant 34 is drawn to a method for conditioning *or caring* for keratin materials (emphasis added). One of ordinary skill in the art can care for keratin materials with soap. The restriction is deemed proper and maintained.

Applicant further elected quaternium-80, cetyltrimethylammonium chloride, polyquaternium-10, polyquaternium-44 and hydroxypropylcellulose as components in the composition.

Claims 34-36 are withdrawn from consideration as being drawn to non-elected subject matter. Claims 1-33 are presented for examination as they read on the elected subject matter.

### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-33 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-35, and 37-46 of copending Application No. 10/606,786 in view of Jacquet et al. (US 4,390,522). Instant claim 1 is drawn to a composition comprising: water; at least one silicone comprising ammonium groups; at least one cationic surfactant; at least two different cationic polymers; and at least one nonionic and nonassociative thickening polymer.

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Copending claim 1 is drawn to a composition comprising at least one silicone with quaternary ammonium groups and at least one liquid fatty alcohol further comprising at least one cationic surfactant (instant claim 12); further comprising at least two different cationic polymers (instant claim 19); further comprising at least one nonionic thickening agent (instant claims 29 and 30); and wherein the cosmetically acceptable medium comprises water. The difference between the compositions is the liquid fatty alcohol in the copending composition. However, Jacquet et al. teach the addition of 0-25 weight percent of a fatty alcohol such as oleyl, lauryl, myristyl, cetyl, stearyl, and isostearyl alcohols to cationic polymer cosmetic compositions for application to the hair (Claims 1, 11 and 12). One of ordinary skill in the art would have added a fatty alcohol such as isostearyl alcohol to the composition of the instant application and produced the copending invention with a reasonable expectation of success. One of ordinary skill in the art would have recognized the obvious variation of the instant invention over the copending application especially in view of the fact that the same silicone polymers are being claimed and the comprising language of the applications allows for the inclusion of other materials.

This is a provisional obviousness-type double patenting rejection.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Janchitraponvej et al. (US 5,556,615) in view of Jahedshoar et al. (WO 01/28506) and Dupuis (US 6,214,326) and Jacquet et al. (US 4,390,522).

Please note that the Examiner is relying on WO 01/28506 for the rejection and using the English language equivalent US 6,602,494 for translation.

Applicant claims a composition comprising: water; at least one silicone comprising ammonium groups; at least one cationic surfactant; at least two different cationic polymers; and at least one nonionic and nonassociative thickening polymer wherein quaternium-80, cetyltrimethylammonium chloride, polyquaternium-10, polyquaternium-44 and hydroxypropylcellulose are components in the composition.

**Determination of the scope and content of the prior art**  
**(MPEP 2141.01)**

Janchitraponvej et al. teach hair conditioning compositions for treating hair comprising a 0.1% to 5% silicone compound such a Quaternium 80, and provide an example with a silicone compound, 1.5% quaternary ammonium compound (a cationic

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surfactant), nonionic surfactant, alkylene glycols, 1.15% thickener (hydroxyethylcellulose), cyclomethicone (additional conditioner), protein-based conditioner, coupling surfactant, fragrance and water (Abstract; column 15, example 5 and claims 1, 8 and 9). Janchitraponvej et al. teach quaternary ammonium compounds for inclusion in the composition (Column 12, lines 25-59) and nonionic surfactants such as polyoxyethylene (20) oleyl ether and N-alkylated-2-pyrrolidones (Column 13, lines 46-67). Janchitraponvej et al. teach quaternary ammonium compounds having one or two long chain alkyl groups containing from 8 to about 18 carbon atoms and the remaining two to three substitutes of the quaternary nitrogen of the quaternary ammonium compound can be short chain alkyl such as methyl and provide a number of examples of cetyl ammonium chlorides (Column 12, lines 25-59). Janchitraponvej et al. teach that an oil-soluble water dispersible quaternary ammonium compound either alone or in combination with a water-soluble quaternary ammonium compound can be used in the composition (Column 12, lines 40-44). Janchitraponvej et al. teach the addition of an optional nonionic thickener such as hydroxypropylcellulose, guar gum, and gum Arabic, for example, at 0% to about 3% by weight (Column 14, lines 1-10). Janchitraponvej et al. teach that the hair is rinsed with water after contacting with the conditioning composition (Claims 14 and 15).

Jahedshoar et al. teaches cetyltrimethylammonium chloride, polyquaternium-10 and polyquaternium-44 in hair conditioner compositions (Column 10, examples 1 and 2 and Column 11, example 3 and 6). Jahedshoar et al. also teaches Quaternium 80 as a suitable silicone polymer with two terminal quaternary ammonium groups for use in the

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composition (Column 8, lines 11-37). Jahedshoar et al. teach cetyltrimethylammonium chloride as a cationic surfactant (Column 4, lines 12-28). Jahedshoar et al. teach cationic polymers for use in the composition including pyridinium and imidazolium or quarternary pyrrolidones, copolymers of polyvinylpyrrolidone, for example (Column 5, line 10 through column 8, line 37).

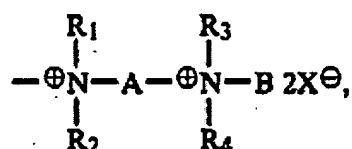
Dupuis teaches cosmetic compositions for treating keratinous material containing cationic polymers and acrylic terpolymers (Abstract). Dupuis teaches that the thickening and/or gelling polymers combined with cationic polymers produces cosmetic formulations which are not pasty or greasy and which give hair good properties of softness, feel and easy disentangling (Column 1, lines 36-44). The thickening and/or gelling polymers are terpolymers with a) methacrylic acid or acrylic acid; b) methacrylates, acrylates such as methyl, ethyl and butyl acrylate, and nonionic surfactants, and c) nonionic urethane monomer (Column 1, line 59 bridging Column 2, lines 63). Dupuis teaches cationic polymers of silicone, polyamines, polyaminoamides and quaternary polyammonium types as known products (Column 3, lines 52-55). Dupuis teaches quaternized vinyl pyrrolidone dialkylaminoalkyl acrylate or methacrylate copolymers, cellulose derivatives containing quaternary ammonium groups, dimethyldiallylammonium salts of hydroxypropylcellulose, cationic polysaccharides and in particular guar gums, polymers consisting of piperaziny units, water soluble polyaminoamides, methyldiallylamne or dimethyldiallyl-ammonium cyclopolymers, polyquaternary ammonium polymers of formula VIII found in column 10, lines 25-30, homopolymers or copolymers derived from acrylic or methacrylic acid, quaternary



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vinylpyrrolidone and vinyl-imidazole polymers, polyamines, methacryloyloxyethyltrimethylammonium chloride crosslinked polymers, condensates of polyamines and epichlorohydrin, and chitin derivatives, for example (Column 3, line 56 through column 12, line 20 and claims 1 and 11). Dupuis teaches that when the composition is a leave-in type it comprises one or more of quaternized or non-quaternized vinylpyrrolidone/dialkylaminoalkyl acrylate or methacrylate copolymers or quaternary vinylpyrrolidone or vinylimidazole polymers (Claim 12). Dupuis teaches the composition as a rinse-out or leave in hair product (Claim 18).

Jacquet et al. teach the diquaternary ammonium cationic polymer, which can be present from 0.1% to 5% in shampoos (Column 8, lines 45-48).



Jacquet et al. teach emulsifiers such as oleyl alcohol polyoxyethylenated with 10 to 30 moles of ethylene oxide, for example (Column 7, lines 24-27). Jacquet et al. teach nonionic detergents such as ethers of polyethoxylated fatty alcohols (Column 7, lines 65-67). Jacquet et al. teach the further addition of cosmetic resins such as polyvinylpyrrolidone and copolymers of polyvinylpyrrolidone (Column 8, lines 54-61). Jacquet et al. teach cationic detergents such as long-chain quaternary ammoniums, alkylpyridinium salts, polyether fatty amines, or imidazoline derivatives (Column 7, lines 62-64). Jacquet et al. teach lauryltrimethylammonium chloride as a cationic ammonium compound which renders obvious other alkyltrimethylammonium salts present in the

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composition from about 5% to about 10% by weight of the composition in total (Column 12, lines 23-25 and 49). Jacquet et al. teach the addition of perfumes, dyes, thickening agents, foam stabilizing agents and softening agents (Column 8, lines 40-44).

**Ascertainment of the difference between the prior art and the claims  
(MPEP 2141.02)**

1. Janchitraponvej et al. do not expressly teach the addition of cetyltrimethylammonium chloride, polyquaternium-10, and polyquaternium-44 to the hair care composition.
2. Janchitraponvej et al. do not expressly teach the addition of the quaternary ammonium salts of instant claim 10.
3. Janchitraponvej et al. do not expressly teach the addition of cationic polymers of instant claims 14-20.
4. Janchitraponvej et al. do not expressly teach the addition of a thickening agent comprising vinylpyrrolidone homopolymer.

**Finding of prima facie obviousness**

**Rational and Motivation (MPEP 2142-2143)**

1. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to add cetyltrimethylammonium chloride, polyquaternium-10, and polyquaternium-44 to the composition Janchitraponvej et al. and produce the instant invention.

One of ordinary skill in the art would have been motivated to do this because Janchitraponvej et al. teach ammonium compounds, which embrace cetyltrimethylammonium chloride, and Jahedshoar et al. teach that polyquaternium-10, and polyquaternium-44 are useful in hair conditioner compositions. "It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art." In re Kerkhoven, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980).

2. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to add quaternary ammonium salt of imidazoline to the composition of Janchitraponvej et al. and produce the instant invention.

One of ordinary skill in the art would have been motivated to do this because: "It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art." In re Kerkhoven, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980). Dupuis teaches quaternary vinylimidazole polymers which renders obvious the quaternary ammonium salt of imidazoline to one of ordinary skill in the art.

3. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to add the cationic polymers taught by Dupuis and Jacquet et al. in the composition of Janchitraponvej et al. and produce the instant invention.

One of ordinary skill in the art would have been motivated to do this because: "It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art." In re Kerkhoven, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980). It is the Examiner's position that the polymer renders obvious the quaternary monomer.

4. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to add the thickening agents taught by Dupuis and suggested by Vatter et al. in the composition of Janchitraponvej et al. and produce the instant invention.

One of ordinary skill in the art would have been motivated to do this because Dupuis teaches that the thickening and/or gelling polymers combined with cationic polymers produces cosmetic formulations which are not pasty or greasy and which give hair good properties of softness, feel and easy disentangling (Column 1, lines 36-44). Vatter et al. teach that polyvinylpyrrolidone is a conventional thickening agent and it is the Examiner's position that one of ordinary skill in the art would immediately envisage the homopolymer of polyvinylpyrrolidone as a thickening agent.

A reference is good not only for what it teaches by direct anticipation but also for what one of ordinary skill in the art might reasonably infer from the teachings. (*In re Opprecht* 12 USPQ 2d 1235, 1236 (Fed Cir. 1989); *In re Bode* 193 USPQ 12 (CCPA) 1976).

In light of the forgoing discussion, the Examiner concludes that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a).

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

### ***Conclusion***

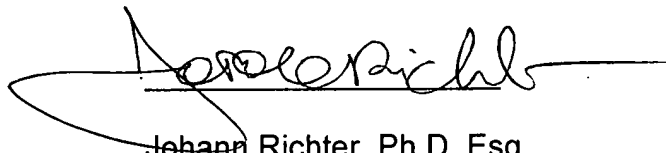
No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernst V. Arnold whose telephone number is 571-272-8509. The examiner can normally be reached on M-F (6:15 am-3:45 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ernst Arnold  
Patent Examiner  
Technology Center 1600  
Art Unit 1616

A handwritten signature in black ink, appearing to read "Johann Richter", with a long horizontal line extending to the right.

Johann Richter, Ph.D. Esq.  
Supervisory Patent Examiner  
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